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10/579,491	05/16/2006	Philippe Ouriel	TD/4-22984/A/PCT	3427
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AHVAZI, BILAN				
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1796				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/579,491

**Applicant(s)**

OUZIEL ET AL.

**Examiner**

Bijan Ahvazi

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date 08/18/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

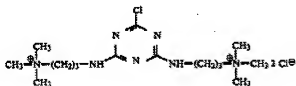
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Perrin *et al.* (Pat. No. US 4,180,664).

3. Perrin *et al.* disclose a process for improving the color yield and fastness properties of dyeing produced with anionic dyes on cellulose fiber material, to the liquors used for carrying out this process, which contain cationic fiber-reactive compounds as fixing agent before, during or after dyeing, with a cationic fiber-reactive, to the fibrous material treated in accordance with this process, and also to the novel cationic fiber-reactive compounds themselves and to a process for their manufacture (Col. 1, lines 7-16) as shown below (Col. 8, lines 47-58, Example 4) corresponding to the instant applicants' limitation claims 1, 2, 3, 4.



Suitable cellulose material can be that from natural and regenerated cellulose, for example hemp, linen, jute, viscose rayon, viscose staple fiber, and in particular cotton and also fiber blends, for example those of polyester/cotton, in which the polyester portion is optionally dyed before or afterwards (Col. 6, lines 11-17). Perrin *et al.* disclose the treatment of the cellulose material with the cationic compound of the formula (1) is effected preferably by a padding process, in which the material is first impregnated with the fixing agent, for example by slop-padding or printing, and then subjected to a fixing process. This application can be carried out before, during or after the dyeing. It is preferred to carry out the treatment before or during the dyeing (Col. 5, lines 16-23) corresponding to the instant applicants' limitation claim 7. The treatment of the cellulose material can also be effected before or during the dyeing by the exhaustion process. In this case it is possible to carry out the process at temperatures in the range between 20° and 100° C (Col. 5, lines 39-42) corresponding to the instant applicants' limitation claim 8. The process is therefore carried out preferably in a strongly dilute aqueous medium under as mild temperature and pH conditions as possible, advantageously at temperatures between 0° and 50 °C and pH values between 6 and 8, preferably in the presence of agents which neutralize mineral acid, for example sodium carbonate or sodium hydroxide (Col. 5, lines 8-15) corresponding to the instant applicants' limitation claim 9.

The treatment of the cellulose material can also be effected before or during the dyeing by the exhaustion process. In this case it is possible to carry out the process at temperatures in the range between 20° and 100° C (Col 5, lines 39-42) corresponding to the instant applicants' limitation claim 10. The treatment liquors contain the compound of the formula (1) preferably in an amount between 0.1 and 20% by weight, in particular between 0.5 and 10%

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by weight, referred to the weight of the cellulose material, or, in padding liquors, of 1 to 100 g/l, preferably 10 to 50 g/l, of padding liquor, whilst the squeezing effect in the padding process is advantageously 60 to 90% by weight (Col. 5, lines 47-54) corresponding to the instant applicants' limitation claim 6. In addition to the cationic reactive compound of the formula (1), these liquors also contain alkali, for example sodium carbonate, sodium bicarbonate, sodium hydroxide or alkali donors, for example sodium trichloroacetate, and also, if appropriate, further additives, such as urea, thickeners, for example alginates, or polyacrylates, or salts, for example sodium chloride, or wetting agents (Col. 5, lines 55-62) corresponding to the instant applicants' limitation claim 12.

Since Perrin *et al.* teach the same method as claimed, the method of increasing the depth of shade of dyed of natural or synthetic fiber of Perrin *et al.* would inherently possess the recited limitation because same ingredients and condition are utilized. Perrin *et al.* teach all the limitations of the instant claims. Therefore Claims 1-4, 6-10 and 12 are being anticipated by Perrin *et al.*

***Claim Rejections - 35 USC § 103***

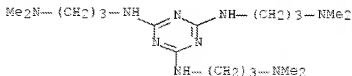
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perrin *et al.* (Pat. No. US 4,180,664) as applied to claims 1-4, 6-10 and 12 above, and further in view of Gerendas *et al.* (Pat. No. US 3,963,714).

6. Perrin *et al.* disclose the features as discussed above. However, Perrin *et al.* do not expressly disclose a specific R group as set forth in formula (1). Gerendas *et al.* disclose special quaternary ammonium salts, derived from 2,4,6-tris-(aminoalkylamino) derivatives of triazine, used as retarders in dyeing anionic polyacrylonitrile fibers with basic dyes (Col. 1, lines 3-6).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided process for improving the color yield and fastness properties of dyeing produced with anionic dyes on cellulose fiber material by Perrin *et al.* with quaternary ammonium salts, derived from 2,4,6-tris-(aminoalkylamino) derivatives of triazine as taught by of Gerendas *et al.* in order to provide a reliable and economical method for controlling dyeing process and effectiveness of quaternary ammonium salts, derived from the derivatives of triazine where shades are concerned. Further, it is held to be a *prima facie* case of obviousness since a person of ordinary skill in the art would have recognized the interchangeability of the element (i.e. functional group) shown in the prior art for the corresponding element disclosed in the specification wherein the side chains syntheses merely done by routine experimentation. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d

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1305 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308,1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999); *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc.*, 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1757 (Fed. Cir. 1998); *Lockheed Aircraft Corp. v. United States*, 193 USPQ 449, 461 (Ct. Cl. 1977); *Data Line Corp. v. Micro Technologies, Inc.*, 813 F.2d 1196, 1 USPQ2d 2052 (Fed. Cir. 1987).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perrin *et al.* (Pat. No. US 4,180,664) as applied to claims 1-4, 6-10 and 12 above, and further in view of Offord *et al.* (Pub. No. US 2004/0055093 A1).

8. Perrin *et al.* disclose the features as discussed above. However, Perrin *et al.* do not expressly disclose wherein the polyamide fiber material is in the form of microfibers. Offord *et al.* disclose a method for treating a synthetic, man-made or natural fiber substrate to create a permanently attached protein sheath around each fiber of the substrate. Such a treatment gives a composite substrate that exhibits the most desirable characteristics of the fiber core coupled with the most desirable characteristics of the protein sheath. It is also possible to apply this technology to individual synthetic fibers or yarns, if desired, before weaving, knitting, stitch-bonding or other method of woven or non-woven substrate formation (Abstract). Offord *et al.* disclose that swatches of sanded microfiber polyester are padded in each formulation and then dried and cured as described in Example 6 and 9 (Page 9, ¶0099).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within generic disclosure of the prior art. Therefore it is ***prima facie***

obvious that fibers and microfibers are considered to be equivalent (exchangeable), it is held that substitution of art recognized equivalents is within the level of ordinary skill in the art. (MPEP § 2144.06). Further, it is held to be a ***prima facie*** case of obviousness since a person of ordinary skill in the art would have recognized the changes in size/proportion based on its suitability for its intended use. *In re Rose* , 220 F.2d 459, 105 USPQ 237 (CCPA 1955), *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984),

### ***Examiner Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijan Ahvazi, Ph.D. whose telephone number is (571)270-3449. The examiner can normally be reached on M-F 8:0-5:0. (Off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from



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call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BA/  
Bijan Ahvazi,  
Examiner  
Art Unit 1796

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

04/1/2009